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C:\Program Files\Stnexp\Queries\10018927.str
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1 2 3 4 5 6 8 9 10 11
                                 12
                                    13
ring/chain nodes :
    17
chain bonds :
   2-7 5-9 14-15 14-16
ring bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
   1-2 1-6 2-3 2-7 3-4 4-5 5-6 14-15 14-16
exact bonds :
   5-9
normalized bonds :
   8-9 8-13 9-10 10-11 11-12 12-13
isolated ring systems :
   containing 1 :
G1:0,[*1]
Match level :
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom
   10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS
                                                       16:CLASS
   17:CLASS 20:CLASS
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chain nodes :

ring nodes :

7 14 15 16

=> s 11 sss full FULL SEARCH INITIATED 15:22:20 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9000 TO ITERATE

100.0% PROCESSED 9000 ITERATIONS

136 ANSWERS

SEARCH TIME: 00.00.01

L3 136 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
149.35 149.56

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:22:35 ON 24 MAR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 24 Mar 2003 VOL 138 ISS 13 FILE LAST UPDATED: 23 Mar 2003 (20030323/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 23 L3

=> d 14 1-23 bib abs hitstr

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textra bond.
     ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS
L4
     2001:798195 CAPLUS
AN
DN
     135:344381
TI
     Preparation of 1-aroyl-piperidinyl benzamidines as inhibitors of Factor Xa
     or tryptase
     Pauls, Heinz; Gong, Yong; Levell, Julian; Astles, Peter C.; Eastwood, Paul
IN
PA
     Aventis Pharmaceuticals Products Inc., USA
SO
     PCT Int. Appl., 81 pp.
     CODEN: PIXXD2
DΤ
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
PΙ
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                      A1
                              20011101
                                             WO 2001-US13810 20010427
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              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002045613
                        A1
                              20020418
                                            US 2001-841417
                                                                20010424
     EP 1278732
                        Α1
                              20030129
                                              EP 2001-930924
                                                                 20010427
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2000-200066P
                              20000427
     GB 2000-18306
                              20000726
                        Α
     US 2001-841417
                        Α
                              20010424
     WO 2001-US13810
                        W
                              20010427
os
     MARPAT 135:344381
GI
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The title compds. [I; Z = C, N; ring C = 4-7 membered azaheterocyclyl, 4-7 membered azaheterocyclenyl; Ar = aryl, monocyclic heteroaryl, bicyclic azaheteroaryl; R1 = H, CH2OR12, CH2SR12, etc.; R2 = H, alkyl, aralkyl, etc.; R3 = cycloalkyl, cycloalkenyl, heterocyclyl, etc.; Xa, Xb, Xc = H, (hydroxy)NH, halo, etc.; R12 = H, alkyl, acyl, etc.], useful for the treatment of patients suffering from conditions which can be ameliorated by the administration of an inhibitor of Factor Xa or tryptase, were prepd. E.g., a multi-step synthesis of II.2F3CCO2H which showed Ki of 9.0 nM against Factor Xa, was given.

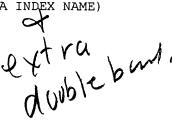
IT 370863-81-3P 370863-82-4P 370863-99-3P 370864-00-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-aroyl-piperidinyl benzamidines as inhibitors of Factor Xa or tryptase)

RN 370863-81-3 CAPLUS

Pyridine, 4-[3-(aminoiminomethyl)phenyl]-1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]-1,2,3,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 370863-82-4 CAPLUS

CN Pyridine, 4-[3-(aminoiminomethyl)phenyl]-1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]-1,2,3,6-tetrahydro-, mono(trifluoroacetate) (9CI)

CN

(CA INDEX NAME)

CM 1

CRN 370863-81-3 CMF C23 H21 N5 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 370863-99-3 CAPLUS

CN Piperidine, 4-[3-(aminoiminomethyl)phenyl]-1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 370864-00-9 CAPLUS

CN Piperidine, 4-[3-(aminoiminomethyl)phenyl]-1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 370863-99-3 CMF C23 H23 N5 O2

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 249292-44-2, 4-(6-0xo-1,6-dihydropyridazin-3-yl)benzoic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 1-aroyl-piperidinyl benzamidines as inhibitors of Factor Xa or tryptase)

RN 249292-44-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4
     ANSWER 2 OF 23 CAPLUS COPYRIGHT 2003 ACS
ΑN
     2001:657511 CAPLUS
DN
     135:195569
     Preparation of 4-[1,6-dihydro-(6H)-6-oxo-3-pyridazinyl]benzoic acid amides
TI
     and esters for treatment of anemia.
IN
     Stoltefuss, Juergen; Loegers, Michael; Braeunlich, Gabriele; Schmeck,
     Carsten; Nielsch, Ulrich; Stuermer, Werner; Gerdes, Christian; Lustiq,
     Klemens; Sperzel, Michael
PΑ
     Bayer A.-G., Germany
SO
     Ger. Offen., 18 pp.
     CODEN: GWXXBX
דת
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
     DE 10010422
                       A1
                             20010906
                                            DE 2000-10010422 20000303
PRAI DE 2000-10010422
                             20000303
                                 Late Priority

extra double bond

extra double bond

4-5 position
     MARPAT 135:195569
OS
GI
                           Ι
AΒ
     Title compds. [I; A, D, E, G = H, halo, CF3, OH, alkyl, alkoxy; R1, R2 =
     H, alkyl; R3 = OR4, NR5R6; R4 = vinyl, allyl, (substituted) cycloalkyl,
     alkyl, aryl; R5 = H, alkyl; R6 = cycloalkyl, tetrahydrobenzothienyl,
     (substituted) aryl, heterocyclyl, alkyl; R5R6 = tetrahydro(iso)quinolinyl,
     morpholinyl, imidazolyl, piperidinyl], were prepd. as erythropoiesis
     stimulators (no data). Thus, 4-[1,6-dihydro-(6H)-6-oxo-3-
     pyridazinyl]benzoic acid imidazolide (prepn. given) was refluxed with
     2,6-difluorobenzylamine in dioxane for 20 h to give 65%
     4-[1,6-dihydro-(6H)-6-oxo-3-pyridazinyl]benzoic acid 2,6-
     difluorobenzylamide.
IT
     356806-39-8P 356806-46-7P 356806-52-5P
     356806-58-1P 356806-64-9P 356806-70-7P
     356806-76-3P 356806-83-2P 356806-88-7P
     356806-94-5P 356807-01-7P 356807-08-4P
     356807-14-2P 356807-20-0P 356807-30-2P
     356807-36-8P 356807-43-7P 356807-49-3P
     356807-55-1P 356807-62-0P 356807-68-6P
     356807-74-4P 356807-81-3P 356807-87-9P
     356807-94-8P 356808-01-0P 356808-07-6P
     356808-13-4P 356808-19-0P 356808-25-8P
     356808-31-6P 356808-38-3P 356808-44-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of carboxyphenylpyridazinones for treatment of anemia)
RN
     356806-39-8 CAPLUS
```

Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-methyl-N-phenyl- (9CI)

CN

(CA INDEX NAME)

RN 356806-46-7 CAPLUS

CN Benzamide, N-[(2,6-difluorophenyl)methyl]-4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 356806-52-5 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-(2-phenylethyl)-(9CI) (CA INDEX NAME)

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RN 356806-58-1 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-, ethyl ester (9CI) (CA INDEX NAME)

RN 356806-64-9 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 356806-70-7 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-phenyl- (9CI) (CA INDEX NAME)

RN 356806-76-3 CAPLUS

CN Benzamide, N-(2-chlorophenyl)-4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 356806-83-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-, cyclopentyl ester (9CI) (CA INDEX NAME)

RN 356806-88-7 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-(2-methylphenyl)-(9CI) (CA INDEX NAME)

RN 356806-94-5 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

RN 356807-01-7 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-(4-phenylbutyl)-(9CI) (CA INDEX NAME)

O
$$\mathbb{N}$$
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RN 356807-08-4 CAPLUS

CN Benzamide, N-[2-(2-chlorophenyl)ethyl]-4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 356807-14-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-, methyl ester

(9CI) (CA INDEX NAME)

RN 356807-20-0 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-2-thiazolyl-(9CI) (CA INDEX NAME)

RN 356807-30-2 CAPLUS

CN Benzamide, N-(2,6-difluorophenyl)-4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 356807-36-8 CAPLUS

CN Benzamide, 4-(1,6-dihydro-4-methyl-6-oxo-3-pyridazinyl)-N-[2-(2-fluorophenyl)ethyl]- (9CI) (CA INDEX NAME)

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RN 356807-43-7 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-(2-furanylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-NH-C & M & N & N & N \\ \hline \end{array}$$

RN 356807-49-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O & O & H \\ \hline \\ MeO-C & O & NH-C & N \\ \hline \end{array}$$

RN 356807-55-1 CAPLUS

CN Morpholine, 4-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & & & & & \\
M & & & & & \\
M & & & & & \\
\end{array}$$

RN 356807-62-0 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 356807-68-6 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 356807-74-4 CAPLUS

CN Quinoline, 1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

RN 356807-81-3 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, propyl ester (9CI) (CA INDEX NAME)

RN 356807-87-9 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

RN 356807-94-8 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-[2-(2-fluorophenyl)ethyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O & F \\ \hline N & || & C - NH - CH_2 - CH_2 \end{array}$$

RN 356808-01-0 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-(2-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 356808-07-6 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-[2-(2-thienyl)ethyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-CH_2-NH-C & N & N & N & C \\ \hline \end{array}$$

RN 356808-13-4 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 356808-19-0 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-phenyl- (9CI) (CA INDEX NAME)

RN 356808-25-8 CAPLUS

CN Benzamide, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 356808-31-6 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, cyclopentyl ester (9CI) (CA INDEX NAME)

RN 356808-38-3 CAPLUS

CN 3-Thiophenecarboxamide, 2-[[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]amino]- (9CI) (CA INDEX NAME)

RN 356808-44-1 CAPLUS

CN 2-Thiophenecarboxamide, 3-[[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]amino]- (9CI) (CA INDEX NAME)

IT 249292-44-2P 356806-33-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of carboxyphenylpyridazinones for treatment of anemia)

RN 249292-44-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 356806-33-2 CAPLUS

CN 1H-Imidazole, 1-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

Page 16

- ANSWER 3 OF 23 CAPLUS COPYRIGHT 2003 ACS L4
- 2001:12427 CAPLUS ΑN
- 134:86265 DN
- ΤI Preparation of 6-carboxyphenyldihydropyridazinones for treatment of anemia.
- Stoltefuss, Jurgen; Braunlich, Gabriele; Logers, Michael; Schmeck, IN Carsten; Nielsch, Ulrich; Bechem, Martin; Gerdes, Christian; Sperzel, Michael; Lustig, Klemens; Sturmer, Werner

Apps Pet

- PΑ Bayer Aktiengesellschaft, Germany; et al.
- PCT Int. Appl., 62 pp. SO CODEN: PIXXD2
- Patent DT
- LΑ German

FAN.CNT 1																		
	PATENT NO.				KI	ND	DATE			APPLICATION NO.					DATE			
PI	WO	0 2001000589			A1		20010104			WO 2000-EP5564					20000616			
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															GH,			
															LR,			
															PT,			
			SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,
			ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM					
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
							GΑ,											
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	ΕP	1196392			A 1		20020417			EP 2000-945764 20000616								
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					•	•	FI,											
									JP 2001-506999				9	20000616				
PRAI	DE 1999-19929782 WO 2000-EP5564					2 A <u>1999062</u> 9												
	WO	2000	-EP5	564	W		2000	0616										
os	MAI	MARPAT 134:86265																
GI																		

$$O = \begin{pmatrix} R^1 & A & D \\ N-N & + D & COR^3 \\ R^2 & G & E \end{pmatrix}$$

AB Title compds. [I; A, D, E, G = H, halo, CF3, OH, alkyl, alkoxy; R1, R2 = H, alkyl; R3 = OR4, NR5R6; R4 = vinyl, allyl, (substituted) cycloalkyl, alkyl, aryl; R5 = H, alkyl; R6 = (substituted) cycloalkyl, aryl, heteroaryl, tetrahydrobenzothienyl], were prepd. as erythropoiesis stimulators (no data). Thus, 4-(4-methyl-1,4,5,6-tetrahydro-6-oxo-3pyridazinyl)benzoic acid imidazolide (prepn. given) was stirred with 2-thienylethylamine in dioxane at 100.degree. for 5 h to give 63.8% 4-(4-methyl-1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoic acid 2-(2-thienylethyl)amide.

IT 316819-82-6P 316819-83-7P 316819-84-8P

Ι

316819-85-9P 316819-86-0P 316819-87-1P 316819-89-3P 316819-90-6P 316819-91-7P 316819-92-8P 316819-93-9P 316819-94-0P 316819-95-1P 316819-96-2P 316819-97-3P 316819-98-4P 316819-99-5P 316820-00-5P 316820-01-6P 316820-02-7P 316820-03-8P 316820-04-9P 316820-05-0P 316820-06-1P 316820-07-2P 316820-08-3P 316820-09-4P 316820-10-7P 316820-11-8P 316820-12-9P 316820-13-0P 316820-14-1P 316820-15-2P 316820-16-3P 316820-17-4P 316820-18-5P 316820-19-6P 316820-20-9P 316820-21-0P 316820-22-1P 316820-23-2P 316820-24-3P 316820-25-4P 316820-26-5P 316820-27-6P 316820-28-7P 316820-29-8P 316820-30-1P 316820-31-2P 316820-32-3P 316820-33-4P 316820-34-5P 316820-35-6P 316820-36-7P 316820-37-8P 316820-38-9P 316820-39-0P 316820-40-3P 316820-41-4P 316820-42-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 6-carboxyphenyldihydropyridazinones for treatment of anemia)

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

RN 316819-82-6 CAPLUS CN

Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)-N-[2-(2thienyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-CH_2-NH-C & M\\ & Me \end{array}$$

RN 316819-83-7 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)-, cyclopentyl ester (9CI) (CA INDEX NAME)

RN316819-84-8 CAPLUS

Benzamide, N-(2-fluorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-CN (CA INDEX NAME)

RN 316819-85-9 CAPLUS

CN Benzamide, N-butyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316819-86-0 CAPLUS

CN Benzamide, N-(2-furanylmethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

$$\bigcirc CH_2-NH-C$$

RN 316819-87-1 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 316819-89-3 CAPLUS

CN Benzamide, N-(phenylmethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

$$Ph-CH_2-NH-C$$

RN 316819-90-6 CAPLUS

CN Benzamide, N-(2,6-dichlorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\$$

RN 316819-91-7 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 316819-92-8 CAPLUS

CN Benzamide, N-(2-phenylethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

$$Ph-CH_2-CH_2-NH-C$$

RN 316819-93-9 CAPLUS

CN Benzamide, N-cyclopropyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

Page 20

RN 316819-94-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, ethyl ester (9CI) (CA INDEX NAME)

RN 316819-95-1 CAPLUS

CN Benzamide, N-phenyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316819-96-2 CAPLUS

CN Benzamide, N-methyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316819-97-3 CAPLUS

CN Benzamide, N-ethyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316819-98-4 CAPLUS

CN Benzamide, N-(1-naphthalenylmethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316819-99-5 CAPLUS

CN Benzamide, N-(2-pyridinylmethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

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RN 316820-00-5 CAPLUS

CN Benzamide, N-(2-chlorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 316820-01-6 CAPLUS

CN Piperidine, 1-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 316820-02-7 CAPLUS

CN Benzamide, N-(3-pyridinylmethyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-03-8 CAPLUS

CN Benzamide, N-(4-methylphenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 316820-04-9 CAPLUS

CN Benzamide, N-(3-chlorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 316820-05-0 CAPLUS

CN Benzamide, N-[(1S)-1-phenylethyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-tetrpyridazinyl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 316820-06-1 CAPLUS

CN 2-Furancarboxylic acid, 5-[[4-(1,4,5,6-tetrahydro-6-oxo-3pyridazinyl)benzoyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O & O & H \\ \hline \\ MeO-C & O & H-C & N \\ \hline \end{array}$$

RN

316820-07-2 CAPLUS Quinoline, 1,2,3,4-tetrahydro-1-[4-(1,4,5,6-tetrahydro-6-oxo-3-CNpyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 316820-08-3 CAPLUS

CN Benzamide, N-(4,5-dihydro-5-methyl-2-thiazolyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & H \\ N & N \\ N & N \\ M \\ M \\ \end{array}$$

RN 316820-09-4 CAPLUS

CN Benzamide, N-cyclohexyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-10-7 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 316820-11-8 CAPLUS

CN Morpholine, 4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 316820-12-9 CAPLUS

CN Benzamide, N-[(3,4-dichlorophenyl)methyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 316820-13-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, propyl ester (9CI) (CA INDEX NAME)

RN 316820-14-1 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

RN 316820-15-2 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 1-methylpropyl ester (9CI) (CA INDEX NAME)

RN 316820-16-3 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, cyclopropylmethyl ester (9CI) (CA INDEX NAME)

$$CH_2-O-C$$

$$N$$

$$N$$

$$N$$

$$N$$

RN 316820-17-4 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, cyclopentyl ester (9CI) (CA INDEX NAME)

RN 316820-18-5 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 2-propenyl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2 - O - C$$

RN 316820-19-6 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

RN 316820-20-9 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 1-cyclopropylethyl ester (9CI) (CA INDEX NAME)

RN 316820-21-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, 2-phenylethyl ester (9CI) (CA INDEX NAME)

$$Ph-CH_2-CH_2-O-C$$

RN 316820-22-1 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, cyclobutylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-O-C & \stackrel{N}{\longrightarrow} & \stackrel{H}{N} & O \end{array}$$

RN 316820-23-2 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 316820-24-3 CAPLUS

CN Benzamide, N-methyl-N-phenyl-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 316820-25-4 CAPLUS

CN Benzamide, N-[2-(2-fluorophenyl)ethyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 316820-26-5 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-CH_2-NH-C & N & N & N \\ \hline \end{array}$$

RN 316820-27-6 CAPLUS

CN Benzamide, N-(2,6-difluorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 316820-28-7 CAPLUS

CN Benzamide, N-(3-fluorophenyl)-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-(9CI) (CA INDEX NAME)

RN 316820-29-8 CAPLUS

CN 3-Thiophenecarboxamide, 2-[[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & NH - C & N \\
\hline
C - NH_2 & O \\
O & O \\
\end{array}$$

RN 316820-30-1 CAPLUS

CN Benzamide, N-[2-(aminocarbonyl)phenyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-31-2 CAPLUS

CN Benzamide, N-[(2-fluorophenyl)methyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 316820-32-3 CAPLUS

CN Benzamide, N-3-pyridinyl-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 316820-33-4 CAPLUS

CN Benzamide, N-1-naphthalenyl-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3pyridazinyl) - (9CI) (CA INDEX NAME)

RN316820-34-5 CAPLUS

CN Benzamide, N-2-naphthalenyl-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3pyridazinyl) - (9CI) (CA INDEX NAME)

RN

316820-35-6 CAPLUS Quinoline, 1,2,3,4-tetrahydro-1-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-CNpyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 316820-36-7 CAPLUS

CN Benzamide, N-cyclopropyl-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-37-8 CAPLUS

CN Benzamide, N-(3-methylbutyl)-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 316820-38-9 CAPLUS

CN Benzamide, N-(2,2-diphenylethyl)-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-39-0 CAPLUS

CN Benzamide, N-[2-(4-methoxyphenyl)ethyl]-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me & O \\ \hline C-NH-CH_2-CH_2 \\ \hline \\ O & H \\ \end{array}$$

RN 316820-40-3 CAPLUS

CN Benzamide, N-[2-(3-methoxyphenyl)ethyl]-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H & O \\ & N & \\ & C - NH - CH_2 - CH_2 \end{array}$$

$$\begin{array}{c|c} O & \\ O & \\$$

RN 316820-41-4 CAPLUS

CN Benzamide, N-(2-methylpropyl)-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 316820-42-5 CAPLUS

CN Benzamide, N-[2-(3,4-dimethoxyphenyl)ethyl]-4-(1,4,5,6-tetrahydro-4-methyl-

6-oxo-3-pyridazinyl) - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{OMe} \\ \text{C-NH-CH}_2\text{-CH}_2 \\ \\ \text{OMe} \\ \text{N} \\ \text{H} \end{array}$$

IT 52239-83-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 6-carboxyphenyldihydropyridazinones for treatment of anemia)

52239-83-5 CAPLUS RN

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 316820-44-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 6-carboxyphenyldihydropyridazinones for treatment of anemia)

RN316820-44-7 CAPLUS

CN 1H-Imidazole, 1-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-

pyridazinyl)benzoyl] - (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4
     ANSWER 4 OF 23 CAPLUS COPYRIGHT 2003 ACS
ΑN
     2000:457028 CAPLUS
DN
     133:89545
TI
     Substituted (aminoiminomethyl- or aminomethyl)benzoheteroaryl compounds
     useful as anticoagulants
     Dankulich, William P.; McGarry, Daniel G.; Burns, Christopher; Gallagher,
IN
     Timothy F.; Volz, Francis A.
PA
     Aventis Pharmaceuticals Products Inc., USA
     PCT Int. Appl., 215 pp.
SO
     CODEN: PIXXD2
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     PATENT NO.
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                                             APPLICATION NO.
PΙ
     WO 2000039087
                       A2
                             20000706
                                             WO 1999-US30623 19991222
     WO 2000039087
                       A3
                             20001109
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             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
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         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                             20000706
                                           CA 1999-2358047 19991222
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     EP 1140901
                             20011010
                                             EP 1999-966560
                        A2
                                                               19991222
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 9916845
                             20011030
                                             BR 1999-16845
                                                               19991222
                        Α
     JP 2002533438
                        Т2
                             20021008
                                             JP 2000-590999
                                                               19991222
     EE 200100341
                             20021216
                        Α
                                             EE 2001-20010034119991222
     NO 2001003142
                        Α
                             20010821
                                             NO 2001-3142
                                                               20010622
PRAI US 1998-113710P
                        A2
                             19981224
     WO 1999-US30623
                             19991222
                        W
OS
     MARPAT 133:89545
GΙ
```

Ι

II

$$HN = \begin{pmatrix} H & O & O & \\ NH_2 & & & & \\ NH_2 & & &$$

AΒ The invention is directed to (aminoiminomethyl) - or (aminomethyl) substituted benzoheteroaryl compds. I, which are useful as inhibitors of Factor Xa (no data) [wherein X = O, S, NH or derivs.; L1 = alkylene, alkenylene, alkynylene; L2 = bond, or as given for L1; Q = NH or derivs., O, CO, COO, OCO, NHCO or derivs., S(0)0-2, SO2NH or derivs, etc.; R = H, cycloalkyl, heterocyclyl, aryl, wide range of other cyclic groups; R2, R3 = H; or R2R3 = NH or derivs.]. The invention is also directed to compns. contg. the compds., methods for their prepn., and their use, e.g., in the inhibition of thrombin formation, or for treating a patient suffering from, or subject to, a disease state assocd. with excess thrombin. Approx. 160 examples were prepd. and claimed, and hundreds of intermediates were prepd. For instance, 4-(pyrid-3-yl)benzoic acid underwent amidation with 3-cyano-5-(2-aminoethyl)indole using TBTU and DIEA, and the product nitrile was treated with HCl(g) in MeOH followed by NH3 in MeOH, to give the invention compd. II.

281233-43-0P, N-[2-(3-Cyano-1H-indol-5-yl)ethyl]-4-(6-oxo-1,6-dihydropyridazin-3-yl)benzamide 281233-44-1P,
4-(6-Oxo-1,6-dihydropyridazin-3-yl)benzoic acid methyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of substituted (aminoiminomethyl- or aminomethyl)benzoheteroaryl compds. as anticoagulants)

RN 281233-43-0 CAPLUS

CN Benzamide, N-[2-(3-cyano-1H-indol-5-yl)ethyl]-4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 281233-44-1 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, methyl ester (9CI) (CA INDEX NAME)

281230-69-1P, N-[2-(3-Carbamimidoyl-1H-indol-5-yl)ethyl]-4-(6-oxo1,6-dihydropyridazin-3-yl)benzamide 281235-31-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of substituted (aminoiminomethyl- or aminomethyl)benzoheteroaryl compds. as anticoagulants)
RN 281230-69-1 CAPLUS

CN Benzamide, N-[2-[3-(aminoiminomethyl)-1H-indol-5-yl]ethyl]-4-(1,6-dihydro-

6-oxo-3-pyridazinyl) - (9CI) (CA INDEX NAME)

RN 281235-31-2 CAPLUS

CN Benzamide, N-[2-[3-(aminoiminomethyl)-1H-indol-5-yl]ethyl]-4-(1,6-dihydro-6-oxo-3-pyridazinyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 281230-69-1 CMF C22 H20 N6 O2

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{C-NH}_2 \\ & \text{C-NH-CH}_2 - \text{CH}_2 \\ & \text{NH} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

```
ANSWER 5 OF 23 CAPLUS COPYRIGHT 2003 ACS
T.4
AN
     1999:723030 CAPLUS
DN
     131:322629
ΤI
     Preparation of 1-heteroarylsulfonyl-4-heteroarylbenzoylpiperazines and
     analogs as Factor Xa inhibitors
     Caulkett, Peter William Rodney; James, Roger; Pearson, Stuart Eric;
IN
     Slater, Anthony Michael; Walker, Rolf Peter
     Zeneca Limited, UK
PA
SO
     PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DТ
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
PΙ
     WO 9957113
                      A1
                            19991111
                                           WO 1999-GB1308
                                                             19990427
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             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2331042
                       AΑ
                            19991111
                                           CA 1999-2331042
                                                            19990427
     AU 9936206
                       A1
                            19991123
                                           AU 1999-36206
                                                             19990427
     AU 754453
                       B2
                            20021114
     BR 9910179
                       Α
                            20010109
                                            BR 1999-10179
                                                             19990427
     EP 1082321
                       A1
                            20010314
                                           EP 1999-918178
                                                             19990427
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     EE 200000527
                       Α
                            20020215
                                            EE 2000-20000052719990427
     NO 2000005497
                       Α
                            20001221
                                           NO 2000-5497
                                                             20001101
PRAI GB 1998-9351
                       Α
                            19980502
     GB 1999-3337
                       Α
                            19990216
     WO 1999-GB1308
                       W
                            19990427
     MARPAT 131:322629
OS
GI
```

AB RZCOZ1SO2R1 [R = (un)substituted heteroaryl; R1 = (un)substituted 2-indolyl, -2-benzimidazolyl, -2-benzo[b]furanyl, etc.; Z = (un)substituted 1,4-phenylene; Z1 = (un)substituted piperidine-4,1-diyl or -piperazine-1,4-diyl] were prepd. Thus, 5-chlorobenzo[b]furan-2-sulfonyl

chloride was amidated by piperazine and the product amidated by 4-(4-pyridyl) benzoic acid to give title compd. I. Data for biol. activity of I were given.

IT 249292-10-2P 249292-23-7P 249292-24-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-heteroarylsulfonyl-4-heteroarylbenzoylpiperazines and analogs as Factor Xa inhibitors)

RN 249292-10-2 CAPLUS

CN Piperazine, 1-[(5-chloro-1H-indol-2-yl)sulfonyl]-4-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 249292-23-7 CAPLUS

CN Piperazine, 1-[(5-chloro-2-benzofuranyl)sulfonyl]-4-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 249292-24-8 CAPLUS

CN Piperazine, 1-[(5-chloro-1H-benzimidazol-2-yl)sulfonyl]-4-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

IT 249292-44-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 1-heteroarylsulfonyl-4-heteroarylbenzoylpiperazines and analogs as Factor Xa inhibitors)

RN 249292-44-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 6 OF 23 CAPLUS COPYRIGHT 2003 ACS
L4
AN
     1999:723017 CAPLUS
DN
     131:337034
     Preparation of 1-naphthylsulfonyl-4-heteroarylbenzoylpiperazines and
TI
     analogs as Factor Xa inhibitors
     Nowak, Thorsten; Preston, John; Rayner, John Wall; Smithers, Michael
IN
     James; Stocker, Andrew
PA
     Zeneca Limited, UK
     PCT Int. Appl., 39 pp.
SO
     CODEN: PIXXD2
DΤ
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                       KIND
                                              APPLICATION NO.
PΊ
     WO 9957099
                              19991111
                                              WO 1999-GB1312
                       A1
                                                                19990427
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
              ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
              CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9936207
                        A1
                             19991123
                                            AU 1999-36207
                                                                19990427
     EP 1082303
                        Α1
                              20010314
                                              EP 1999-918179
                                                                19990427
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
     US 6395731
                              20020528
                                              US 2000-674563
                        В1
                                                                20001220
PRAI GB 1998-9349
                        Α
                              19980502
     WO 1999-GB1312
                              19990427
                        W
OS
     MARPAT 131:337034
GΙ
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$$A-Y-CO-Z-SO_2 - \begin{bmatrix} D \\ - \end{bmatrix} - \begin{bmatrix} D^1 \\ - \end{bmatrix} - E$$

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AB Title compds. (I) [where A = 5- or 6-membered monocyclic heteroaryl (un)substituted by 1-3 halo, oxo, CO2H, CF3, CN, NH2, OH, NO2, (amino)alkyl, alkoxy(carbonyl), and/or (di)alkylamino; Y = (un)substituted

phenylene; Z = (un)substituted piperidine-4,1-diyl or piperazine-1,4-diyl; D and D1 = independently H, alkyl, alkenyl, alkynyl, oxo, or OH; E = F, Cl, or Br] were prepd. as antithrombotics and anticoagulants. Thus, 4-(4-imidazolyl)benzoic acid HCl (2-step prepn. given) was amidated with 1-(6-chloronaphth-2-ylsulfonyl)piperazine to yield the title imidazolylbenzoylpiperazine (II). The IC50 values of invention compds. ranged from 0.001 to 0.1 .mu.M for Factor Xa inhibition and were > 40 .mu.M for thrombin inhibition (no individual data given). Data for anticoagulant activity of I in conventional prothrombin time tests were given.

IT 249292-44-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of 1-naphthylsulfonyl-4-heteroarylbenzoylpiperazines
and analogs as Factor Xa inhibitors for treatment of thrombosis
mediated diseases and coagulation disorders)

RN 249292-44-2 CAPLUS

CN Benzoic acid, 4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

249887-61-4P

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; prepn. of 1-naphthylsulfonyl-4-

heteroarylbenzoylpiperazines and analogs as Factor Xa inhibitors for treatment of thrombosis mediated diseases and coagulation disorders)

RN 249887-61-4 CAPLUS

CN Piperazine, 1-[(6-bromo-2-naphthalenyl)sulfonyl]-4-[4-(1,6-dihydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

IT 249887-46-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; prepn. of 1-naphthylsulfonyl-4-

heteroarylbenzoylpiperazines and analogs as Factor Xa inhibitors for treatment of thrombosis mediated diseases and coagulation disorders)

RN 249887-46-5 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[4-(1,6-dihydro-6-oxo-

3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

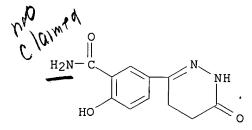
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2003 ACS
- AN 1999:458498 CAPLUS
- DN 131:243233
- TI Synthesis of novel 4,5-dihydropyridazin-3(2H)-one derivatives with benzoxazine and benzoxazole heterocycles at the 6-position as cardiotonic agents
- AU Abou-Zeid, K. A. M.; Youssef, Khairia M.; Shaaban, M. A.; El Telbany, F. A.; Al Zanfaly, S. H.
- CS Organic Chemistry Department, Faculty of Pharmacy, Cairo University, Cairo, Egypt
- SO Egyptian Journal of Pharmaceutical Sciences (1998), Volume Date 1997, 38(4-6), 303-317
 CODEN: EJPSBZ; ISSN: 0301-5068
- PB National Information and Documentation Centre
- DT Journal
- LA English
- AB A series of pyridazinone derivs. carrying benzo heterocycles such as benzoxazole and benzoxazine was synthesized and tested as inhibitors of cAMP phosphodiesterase enzyme (PDE). The most promising compd. in this series was 6-[2,4-dioxo-3,4-dihydro-1,3(2H)-benzoxazin-6-yl]-4,5-dihydropyridazin-3(2H)-one, which has shown potent inhibiting activity on cAMP PDE and was ten times more potent than milrinone (a com. available cardiotonic agent).
- IT 244303-94-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of pyridazinone derivs. as inhibitors of cAMP phosphodiesterase enzyme)

- RN 244303-94-4 CAPLUS
- CN Benzamide, 2-hydroxy-5-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4
    ANSWER 8 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN
     1997:346854 CAPLUS
DN
     126:317387
     Preparation of 2-(1,3-benzodioxol-5-yl)-2,3-dihydropyridazin-3-on-2-
ТT
     ylacetates and related compounds as endothelin receptor antagonists.
     Dorsch, Dieter; Oswald, Mathias; Mederski, Werner; Wilm, Claudia;
IN
     Schmitges, Claus; Christadler, Mara
PA
    Merck Patent Gmbh, Germany
     Ger. Offen., 28 pp.
SO
     CODEN: GWXXBX
DT
     Patent
T.A
     German
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                     ----
PΙ
     DE 19537548
                     A1
                           19970410
                                          DE 1995-19537548 19951009
     CA 2207243
                      AΑ
                           19970417
                                          CA 1996-2207243 19960919
     WO 9713758
                                          WO 1996-EP4111
                     A1
                           19970417
                                                           19960919
        W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, NO, PL, RU, SK, UA, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    AU 9672119
                           19970430
                      Α1
                                          AU 1996-72119
                                                           19960919
     EP 796250
                      Α1
                           19970924
                                          EP 1996-933341
                                                            19960919.
        R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     BR 9606668
                      Α
                           19970930
                                          BR 1996-6668
                                                           19960919
     CN 1168137
                      Α
                           19971217
                                          CN 1996-191388
                                                            19960919
     JP 10511118
                      Т2
                           19981027
                                          JP 1996-514665
                                                            19960919
     ZA 9608483
                      Α
                           19970520
                                          ZA 1996-8483
                                                           19961008
    NO 9702612
                      A
                           19970808
                                          NO 1997-2612
                                                            19970606
     US 5883090
                      Α
                           19990316
                                          US 1997-849344
                                                           19970606
PRAI DE 1995-19537548 A
                           19951009
     WO 1996-EP4111
                      W
                           19960919
OS
    MARPAT 126:317387
GΙ
```

Title compds. [I; Y = CR4R41CR4R41, CR4:CR41, CR4R41S; R1 = (substituted) Ph, naphthyl, heterocyclyl, R3, R4; R2 = (substituted) (anellated) aryl; R3 = cyano, CO2H, (modified) alkylcarbonyl, sulfonylaminocarbonyl, tetrazol-5-yl; R4, R41 = H, (modified) alkyl; R5 = (modified) alkyl, (substituted) aryl], were prepd. for treatment of hypertension, heart failure, kidney failure, brain infarct, coronary heart disease, renal, cerebral, and myocardial ischemia, subarachnoid hemorrhage, inflammation, asthma, and endotoxic shock (no data). Thus, 2,3-dihydro-4,6-dimethylpyridazin-3-one, 2-(1,3-benzodioxol-5-yl)-2-bromo-N-(4-isopropylphenylsulfonyl)acetamide, and Cs2CO3 were stirred 2 h in DMF to give 2-(1,3-benzodioxol-5-yl)-2-(2,3-dihydro-4,6-dimethylpyridazin-3-on-2-yl)-N-(4-isopropylphenylsulfonyl)acetamide.

IT 189369-92-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-(1,3-benzodioxol-5-yl)-2,3-dihydropyridazin-3-on-2 ylacetates and related compds. as endothelin receptor antagonists)
RN 189369-92-4 CAPLUS
CN 1(4H)-Pyridazineacetic acid, .alpha.-1,3-benzodioxol-5-yl-3-(4 carboxyphenyl)-5,6-dihydro-6-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1991:429229 CAPLUS

DN 115:29229

TI Studies on cardiotonic agents. VI. Synthesis of novel 4,5-dihydro-3(2H)-pyridazinone derivatives carrying some benzoheterocycles at the 6-position

AU Nomoto, Yuji; Takaj, Haruki; Ohno, Tetsuji; Kubo, Kazuhiro

CS Pharm. Res. Lab., Fuji, Kyowa Hakko Kogyo Co., Ltd., Shizuoka, 411, Japan

SO Chemical & Pharmaceutical Bulletin (1991), 39(2), 352-7 CODEN: CPBTAL; ISSN: 0009-2363

DT Journal

LA English

OS CASREACT 115:29229

GΙ

AB Several benzothiazolyl, imidazobenzothiazolyl, benzothienyl, benzothienopyrimidinyl and quinazolinyl 4,5-dihydro-3(2H)-pyridazinones were synthesized and examd. for cardiotonic activity in anesthetized dogs after i.v. administration. Thus, cyclocondensation of 3-(3-amino-4-chlorobenzoyl)butyric acid with CS2 and H2NNH2 gives (mercaptobenzothiazolyl)methylpyridazinone I. (Methylamino)pyridazinylquinazoline II showed potent and long-lasting inotropic activity (relative potency = 2.11, milrinone = 1). II was more potent than indolidan (relative potency = 1.53) which is one of the most potent inotropic agents to date.

IT 134440-82-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclocondensation of, with formic acid and acyl chlorides)

RN 134440-82-7 CAPLUS

CN Benzamide, 2-amino-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)(9CI) (CA INDEX NAME)

IT 134440-81-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L4 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1991:185420 CAPLUS

DN 114:185420

Inotropic, vasodilator and low Km, cAMP-selective, cGMP-inhibited phosphodiesterase (PDE III) inhibitory activities of 4a-methyl-4,4a-dihydro-5H-indeno[1,2-c]pyridazin-3(2H)-ones and 4a-methyl-4,4a,5,6-tetrahydrobenzo[h]cinnolin-3(2H)-ones

AU Bakewell, S. J.; Coates, W. J.; Comer, M. B.; Reeves, M. L.; Warrington, B. H.

CS SmithKline and French Res. Ltd., Welwyn/Hertfordshire, AL6 9AR, UK

SO European Journal of Medicinal Chemistry (1990), 25(9), 765-74 CODEN: EJMCA5; ISSN: 0223-5234

DT Journal

LA English

OS CASREACT 114:185420

GΙ

Methylindenopyridazinones I (R = cyano, CONH2, NH2, NHAc, OMe, n = 1) and AΒ benzocinnolinones I (n = 2) were synthesized. Thus, I (R = cyano, n = 1)was prepd. by hydroxymethylation of 4-bromopropiophenone followed by intramol. cyclocondensation to give 5-bromo-2-methylindan-1-one which was cyanated and alkylated with Et bromoacetate followed by cyclocondensation with hydrazine. Their PDE III inhibitory, inotropic and vasodilator potencies were compared with those of their normethyl analogs and their bicyclic 4,5-dihydro-6-phenylpyridazinone analogs II (R1 = H, Me, R2 = cyano, CONH2, NH2, OMe, NHAc). The structure-activity relationships of the tricyclic pyridazinones differ from those of bicyclic pyridazinones mainly in respect of the effect of introducing the Me group into the pyridazinone ring. While in the 4,5-dihydro-6-phenylpyridazin-3(2H)-ones, introduction of a 5-Me group has been widely reported to lead to compds. of significantly greater potency, the novel tricyclic 4amethylpyridazinones I showed similar levels of inotropic, vasodilator and PDE III inhibitory potency to their normethyl analogs. Possible reasons for this difference in behavior are discussed.

IT 52240-83-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and inotropic and phosphodiesterase inhibitory activity of)
52240-83-2 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN

Page 51

ANSWER 11 OF 23 CAPLUS COPYRIGHT 2003 ACS L41990:235248 CAPLUS AN 112:235248 DN ΤI 1,4-Bis(3-oxo-2,3-dihydropyridazin-6-yl)benzene analogs: potent phosphodiesterase inhibitors and inodilators Coates, William J.; Prain, H. Douglas; Reeves, Martin L.; Warrington, ΑU Brian H. CS Smith Kline and French Res. Ltd., Welwyn/Hertfordshire, AL6 9AR, UK Journal of Medicinal Chemistry (1990), 33(6), 1735-41 SO CODEN: JMCMAR; ISSN: 0022-2623 DT Journal LΑ English OS CASREACT 112:235248 GI

$$\begin{bmatrix} 0 & & & & \\ & N - N & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ &$$

AB The title compds. I (R = H, Me; X = S, CH2; Z = 1,4-, 1,3-C6H4, 2,5-thienyl, 4-C6H4C6H4-4') were prepd. from bis(alkanoyl)benzenes by conversion to .gamma.-keto acids and treatment with N2H4. I were evaluated for inhibition of low Km, cAMP-selective, cGMP-inhibited phosophodiesterase (PDE III) and hemodynamic activity. The most potent PDE III inhibitor was I (R = Me, X = CH2, Z = 1,4-C6H4) which also retained the greatest inotropic and vasodilator potency. PDE III inhibitory potency is assocd. with overall planar topol. of the phenylpyridazinone moiety and the presence of two critically sepd. electroneg. centers. The generally higher level of PDE III inhibitory potency of I relative to 6-(4-substituted-phenyl)pyridazin-3(2H)-one derivs. (e.g. Sicar, I; et al., 1987, Moos, W.H.; et al., 1987) derives from a closer to optimal sepn. of two interacting points in the inhibitor mol. achieved through the more extended bis(azinone) structure. Correlation between the pharmacol. and PDE III inhibitory activities of I provides addnl. evidence for PDE III being an important mediator of inodilator action.

IT 52240-83-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (ionotropic, vasodilating, and phosphodiesterase inhibiting activities of)
52240-83-2 CAPLUS

RN 52240-83-2 CAPLUS
CN Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

Page 53

L4 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:631045 CAPLUS

DN 109:231045

TI Preparation of piperidine-containing pyridazinone derivatives or their salts as cardiotonics

IN Okujima, Hiromi; Narimatsu, Akihiro; Kobayashi, Makio; Furuya, Rikizo; Kitada, Yoshi

PA Mitsubishi Kasei Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE PΙ JP 63154683 19880627 A2 JP 1986-299566 19861216 PRAI JP 1986-299566 19861216 OS MARPAT 109:231045 GI

$$R^2$$
 R^3
 R^4
 $X (CH2)mN$
 R
 R

Title derivs. I (R = Q, Q1; R1 = H, C1-5 alkyl; R2 - R4 = H, C1-5 alkoxy, AΒ OH; 2 of R2 - R4 = OCH2O, OCH2CH2O; X = O, S, NR5, direct bond; R5 = H, C1-5 alkyl; m, n = 0-4; X = direct bond when <math>m = 0) or their salts are prepd. as cardiotonics. 4-(Aminomethyl)piperidine was refluxed with PhCHO in toluene for 2 h, and the reaction mixt. was treated with Et3N and p-MeOC6H4CH2Cl at 80.degree. for 10 h, and then treated with H2O and concd. HCl at 80.degree. for 4 h to give 65% 4-aminomethyl-1-(4methoxybenzyl)piperidine (II). A soln. of 0.23 g 4-(4-methyl-6-oxo-1,4,5,6-tetrahydropyridazin-3-yl)benzoic acid in DMF/THF was treated with Et3N and ClCO2Et at -20 to -30.degree., and the reaction mixt. was treated with 0.24 g II at -20.degree. for 20 min, and then at room temp. for 2 h to give I (R = Q, R1 = Me, R2 = R3 = H, R4 = 4-OMe, X = direct bond, m = n= 1), which was treated with an aq. HCl/EtOH to give 0.30 g its HCl salt (III). In guinea pig left atrium in vitro, III at 3 .times. 10-5~g/mLincreased cardiac contractility by 77.3%.

Ι

IT 52240-81-0

RL: RCT (Reactant); RACT (Reactant or reagent) (amidation of, with (aminomethyl)piperidine deriv.)

RN 52240-81-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 117731-87-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as cardiotonic)

RN 117731-87-0 CAPLUS

CN Benzamide, N-[[1-[(4-methoxyphenyl)methyl]-4-piperidinyl]methyl]-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

ANSWER 13 OF 23 CAPLUS COPYRIGHT 2003 ACS L4

1988:590451 CAPLUS AN

DN 109:190451

ΤI Preparation of 1-[4-(1,6-dihydro-6-oxopyridazin-3-yl)benzoyl]piperazine derivatives and their salts as cardiotonics

IN Okujima, Hiromi; Narimatsu, Akihiro; Kobayashi, Makio; Furuya, Rikizo; Tsuda, Kunio; Kitada, Yoshi

PA Mitsubishi Kasei Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE PΙ JP 63154672 Α2 19880627 JP 1986-300696 19861217 PRAI JP 1986-300696 19861217 MARPAT 109:190451

OS

GΙ

AB Title derivs. I (R = Q, Q1; R1 = H, C1-5 alkyl; R2 - R4 = H, C1-5 alkoxy, OH; 2 of R2 - R4 = OCH2O, OCH2CH2O; X = 0, S, NR5; R5 = H, C1-5 alkyl; n = 01-4) and their salts are prepd. as cardiotonics. A soln. of o-MeOC6H4OCH2COCl in THF was added to a mixt. of piperazine HBr and aq. EtOH soln. at 0.degree. over 10 min and the mixt. was stirred at 0.degree. for 30 min and then at room temp. overnight to give 4-(2methoxyphenoxyacetyl)piperazine, which was refluxed with LiAlH4 in THF at 90.degree. for 2 h to give 77% 4-(2-methoxyphenoxyethyl)piperazine (II). Pyridazinylbenzoic acid deriy: III (R5 = Me) (0.75 g) was treated with ClCO2Et and Et3N in DMF/THF between -20 and -30.degree. and the reaction mixt. was treated with 0.76 g II at -20.degree. for 20 min under stirring and then at room temp. for 2 h to give I (R = Q, R1 = Me, R2 = 2-OMe, R3 =R4 = H, X = O, n = 2) (IV), which was treated with an aq. HC1/EtOH to give 0.58 g IV.HCl (V). In a guinea pig's left atrium in vitro, V at 10-5 or 3 $\,$.times. 10-5 g/mL increased cardiac contractility by 16.7 or 75.0%, resp. ΙT

52239-83-5 52240-81-0

RL: RCT (Reactant); RACT (Reactant or reagent) (amidation of, with (phenoxyethyl)piperazines)

RN 52239-83-5 CAPLUS

Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX CN NAME)

RN 52240-81-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 117132-46-4P 117132-47-5P 117132-48-6P 117132-49-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as cardiotonic)

RN 117132-46-4 CAPLUS

CN Piperazine, 1-(2-phenoxyethyl)-4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 117132-47-5 CAPLUS

CN Piperazine, 1-[2-(4-methoxyphenoxy)ethyl]-4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 117132-48-6 CAPLUS

CN Piperazine, 1-[2-(4-methoxyphenoxy)ethyl]-4-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 117132-49-7 CAPLUS

CN Piperazine, 1-[2-(2-methoxyphenoxy)ethyl]-4-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:590450 CAPLUS

DN 109:190450

TI Preparation of pyridazinone-containing piperazine derivatives and their salts as cardiotonics

IN Okujima, Hiromi; Narimatsu, Akihiro; Kobayashi, Makio; Furuya, Rikizo; Tsuda, Kunio; Kitada, Yoshi

PA Mitsubishi Kasei Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

OS MARPAT 109:190450

GI

Title derivs. I (R = Q; R1 = Q1, Q2; R2 - R4 = H, C1-5 alkoxy, OH; R5 = H, C1-5 alkyl; two of R2 - R4 = OCH2O, OCH2CH2O; m = 0-4; n = 1-4) and their salts are prepd. as cardiotonics. A soln. of 1-(4-methoxyphenyl)piperazine and N-(2-bromoethyl)phthalimide in DMF was treated with Et3N at 80.degree. for 5 h and the product (yield 28%) was stirred with an aq. H2NNH2.H2O in Et0H at 70.degree. for 4 h to give 100 % I (R = C6H4OMe-4, R1 = H, m = 0, n = 2) (II). 6-(4-Carboxyphenyl)-2,3,4,5-tetrahydropyridazin-3-one (0.75 g) was treated with C1CO2Et in DMF/THF contg. Et3N between -20 and -30.degree., the reaction mixt. was treated with a soln. of 0.81 g II at -20.degree. for 20 min, and then at room temp. for 2 h to give I (R = C6H4OMe-4, R1 = Q1, R5 = H, m = 0, n = 2) (III), which was treated with aq. HC1/Et0H to give 0.85 g III.HC1 (IV). In guinea pig left atrium in vitro, IV at 10-5 or 3 .times. 10-5 g/mL increased cardiac contractility 42.1 or 58.0%, resp.

IT 52239-83-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (amidation of, with (aminoethyl)piperazines)

RN 52239-83-5 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 52240-81-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation with, of oxopyridazinylbenzoic acids)

RN 52240-81-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 117046-77-2P 117046-78-3P 117046-79-4P 117046-80-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as cardiotonic)

RN 117046-77-2 CAPLUS

CN Benzamide, N-[2-[4-(4-methoxyphenyl)-1-piperazinyl]ethyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline \\ C-NH-CH_2-CH_2-N \\ \hline \\ O \\ \end{array}$$

RN 117046-78-3 CAPLUS

CN Benzamide, N-[2-[4-[(4-methoxyphenyl)methyl]-1-piperazinyl]ethyl]-4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 117046-79-4 CAPLUS

CN Benzamide, N-[2-[4-[2-(3,4-dimethoxyphenyl)ethyl]-1-piperazinyl]ethyl]-4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ C-NH-CH_2-CH_2-N \\ N-CH_2-CH_2 \\ \hline \\ OMe \\ \end{array}$$

RN 117046-80-7 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)-N-[2-[4-[(2,3,4-trimethoxyphenyl)methyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:48712 CAPLUS

DN 108:48712

TI Strategic approaches to drug design. II. Modeling studies on phosphodiesterase substrates and inhibitors

AU Davis, A.; Warrington, B. H.; Vinter, J. G.

CS Smith Kline and French Res., Welwyn/Herts., AL6 9AR, UK

SO Journal of Computer-Aided Molecular Design (1987), 1(2), 97-119 CODEN: JCADEQ; ISSN: 0920-654X

DT Journal

LA English

AΒ Computational chem. and mol. graphics were combined with both phys. and biol. data to study the interactions of the cat ventricle phosphodiesterase enzyme with the natural substrates cAMP and cGMP and synthetic inhibitors. Specific binding points (defined by points at which the electrostatic interaction of a proton with the target are most stable) were used to give a consistent picture of the binding requirements of both nonspecific and specific inhibitors. These points are situated on or beyond the van der Waals surface and broadly consist of: (a) a single, large point corresponding with an anionic group and probably representing a primary link; (b) a variable set of points assocd. with the purine of the natural substrate which are likely to represent the secondary binding area and which are able, in appropriate combination with (a), to define specificity; and (c) a 3rd point which (by hydrophobic interaction) can further affect potency by its (chiral) influence. The complementary study by lone-pair construction and regression anal. reached essentially the same working rules for structure-activity and provided quant. support for the hypothesis. It is notable that structural overlay in this particular case seems to be of less significance than electronic overlay. Indeed, structural comparisons have been misleading at times. The main driving forces for recognition and orientation are undoubtedly the coulombic interactions which were the subject of these studies. However, steric influences play their part in the bound state. Compds. designed to access the more effective $N\left(1\right)$ site demonstrated by these studies were found to show the expected high potency.

IT 52240-83-2

RL: BIOL (Biological study)

(cyclic nucleotide phosphodiesterase inhibition by, structure in relation to)

RN 52240-83-2 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CF INDEX NAME)

L4 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1986:442832 CAPLUS

DN 105:42832

TI Pyridazinones

IN Okujima, Hiromi; Narimatsu, Akihiro; Kobayashi, Makio; Furuya, Rikizo; Kitada, Yoshi

PA Mitsubishi Chemical Industries Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

111110111 1							
		PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
	PI	JP	61044873	,A2	19860304	JP 1984-167336	19840810
		JP	05045585	B4	19930709		
	PRAI	JP	1984-167336		19840810		
	GI						

$$R^{1}$$
 R^{2}
 R^{3}
 R^{2}
 R^{3}
 R^{4}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}
 R^{0}

AB The title compds. [I; R1-R3 = H, OH, alkoxy, or any 2 of R1-R3 = OCH2O or OCH2CH2O; R4 = alkyl; n is an integer of 0-4], useful as cardiotonics (effective at 10 .mu.g/kg i.v. in dogs), antihypertensives, and vasodilators, were prepd. Thus, a mixt. of the benzoic acid II, Et3N, THF, and DMF was cooled to -20.degree. to -30.degree., C1CO2Et in THF added, then the piperazine deriv. III in CH2Cl2 added, and the resulting mixt. allowed to warm to room temp. over 1 h to give 58% I [R1 = p-MeO, R2 = R3 = H, R4 = Me, n = 1].

Ι

IT 52240-81-0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (acylation by, of piperazine deriv.)

RN 52240-81-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 103118-84-9P 103118-85-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as pharmaceutical)

RN

103118-84-9 CAPLUS
Piperazine, l-[(4-methoxyphenyl)methyl]-4-[4-(1,4,5,6-tetrahydro-4-methyl-CN 6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ \text{MeO} \end{array}$$

RN 103118-85-0 CAPLUS

Piperazine, 1-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)benzoyl]-CN 4-[(2,3,4-trimethoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1986:168480 CAPLUS

DN 104:168480

TI Pyridazinone derivatives and their salts

IN Okujima, Hiromi; Narimatsu, Akihiro; Kobayashi, Makio; Tsuda, Kunio; Kitada, Yoshi

PA Mitsubishi Chemical Industries Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60197660	A2	19851007	JP 1984-53972	19840321
PRAI	JP 1984-53972		19840321		
CT					

AB The title derivs. (I; R-R2 = H, OH, C.ltoreq.5 alkoxy; RR1 = OCH2O, OCH2CH2O; n = 0-4) or their salts were prepd. as cardiotonics. Thus, the mixed anhydride prepd. from 246 mg (oxopyridaziyl)benzoic acid II and 0.11 mL ClCO2Et reacted with 300 mg 4-(2,3,4-trimethoxybenzyl)piperazine in DMF/THF at 0.degree.-room temp. for 2 h to give 30 mg III. In dogs 300 .mu.g III/kg increased cardiac contractile force 146.4%.

III

IT 52239-83-5

MeO

RL: RCT (Reactant); RACT (Reactant or reagent)
 (acylation by, of piperazines)

RN 52239-83-5 CAPLUS

OMe

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

IT 101187-65-9P 101187-66-0P 101187-67-1P 101539-61-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and cardiotonic activity of)

RN 101187-65-9 CAPLUS

CN Piperazine, 1-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]-4[(2,3,4-trimethoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 101187-66-0 CAPLUS

CN Piperazine, 1-[2-(4-methoxyphenyl)ethyl]-4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 101187-67-1 CAPLUS

CN Piperazine, 1-(4-methoxyphenyl)-4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

RN 101539-61-1 CAPLUS

CN Piperazine, 1-[(4-methoxyphenyl)methyl]-4-[4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)benzoyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1984:490956 CAPLUS

DN 101:90956

TI Pyridazinone derivatives

PA Mitsui Toatsu Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

GI

ran.cni i						
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI JP 59053472	A2	19840328	JP 1982-163122	19820921		
JP 05024149	В4	19930406				
PRAI JP 1982-163122		19820921				
OS CASREACT 101:90956						

$$R^{1}NH$$
 $N-M$
 $N-M$

AB Pyridazinone derivs. I [R, R1, R2 = Me, H, Me; Br, Ac, H; cyano, Ac, H; H2NCO, Ac, H; Me, Me2NCH2CO, Me; Me, L-PhCH2CH(NH2)CO, Me; Me, EtCO, Me] were prepd. by reaction of 3,4,5-R(R1NH)R2C6H2COCHMeCH2CO2H (II) with H2NNH2 (III) and had hypotensive activity in spontaneously hypertensive rats (p.o.) (no data). Thus, refluxing 2.5 g II (R = R2 = Me, R1 = H) with 0.75 g III in EtOH 2 h gave 1.2 g I (R = R2 = Me, R1 = H).

IT 91486-11-2P

RN 91486-11-2 CAPLUS

CN Benzamide, 2-(acetylamino)-5-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1982:472382 CAPLUS

DN 97:72382

TI Pyridazine derivatives as fungicides

PA Sankyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

GΙ

PAN. CNI I							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 57050972	A2	19820325	JP 1980-126496	19800911		
	JP 62051953	B4	19871102				
PRAI	JP 1980-126496		19800911				
os	CASREACT 97:7238	2					

$$R^{1}$$
 $N-N$
 $N-N$

AB Arylpyridazine derivs. (I; R = H, halo; R1 = halomethyl, alkylthiomethyl, formyl, HO2C, HOCH2, alkanoyloxymethyl, aminomethyl; R2 = H, halo), effective herbicides at 30-100 ppm, were prepd. Thus, a mixt. of I (R = R2 = Cl, R1 = Me) 10.2, NBS 7.84, and Bz2O2 0.5 g in CCl4 was refluxed 4 h to give 2.95 g I (R = R2 = Cl, R1 = BrCH2). Also prepd. were 6 addnl. I.

IT 82593-03-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and herbicidal activity of)

Ι

RN 82593-03-1 CAPLUS

CN Benzoic acid, 2,6-dichloro-4-(1,6-dihydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1978:98934 CAPLUS

DN 88:98934

TI Application of regression analysis to the hypotensive activities of pyridazinones

AU Kulkarni, Vithal M.

CS K. M. K. Coll. Pharm., Ulhasnagar, India

SO Current Science (1977), 46(23), 801-3 CODEN: CUSCAM; ISSN: 0011-3891

DT Journal

LA English

AB Regression anal. of 32 compds. in a pyridazinone series has been performed using the Free-Wilson method. Individual group contributions for 28 analogs have been calcd. sep. by taking the rank order and logarithm of hypotensive activities as dependent variables. The degree of agreement between the obsd. and the calcd. activities is estd. at 92% variance level with F = 10.614 and multiple correlation coeff., r = 0.986. Based on the group contributions and on the no. of times a substituent occurs at a particular position in the compd., a quant. structure-activity relationship has been studied.

IT 36725-23-2 52239-83-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(hypotensive activity of)

RN 36725-23-2 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$H_2N-C$$

RN 52239-83-5 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1974:420767 CAPLUS

DN 81:20767

TI 6-(Substituted phenyl)-5-substituted-4,5-dihydro-3(2H)-pyridazinones. Antihypertensive agents

AU McEvoy, Francis J.; Allen, George R., Jr.

CS Lederle Lab. Div., Am. Cyanamide Co., Pearl River, NY, USA

SO Journal of Medicinal Chemistry (1974), 17(3), 281-6 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

AB Of a series of 57 title compds. prepd. by reacting the appropriate .gamma.-keto acid or ester with hydrazine, 6-(p-cyanophenyl)-2-ethyl-4,5-dihydro-5-methyl-3(2H)-pyridazinone (I) [51936-69-7] and 6-(p-cyanophenyl)-4,5-dihydro-5-methyl-3(2H)-pyridazinone (I) [51936-70-0] and 6-(p-cyanophenyl)-4,5-dihydro-5-methyl-3(2H)-pyridazinone (II) caused marked lowering of blood pressure over a 24 hr period in normotensive rats. The structure-activity relationship is discussed.

IT 52240-80-9P 52240-81-0P 52240-82-1P 52240-83-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and antihypertensive activity of)

RN 52240-80-9 CAPLUS

CN Benzoic acid, 3-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 52240-81-0 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 52240-82-1 CAPLUS

CN Benzamide, 3-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\bigcap_{\mathsf{Me}}^{\mathsf{N}}\bigcap_{\mathsf{Me}}^{\mathsf{O}}\bigcap_{\mathsf{C}-\mathsf{NH}_2}^{\mathsf{O}}$$

RN 52240-83-2 CAPLUS CN Benzamide, 4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

L4 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1974:420766 CAPLUS

DN 81:20766

TI 6-Phenyl-4,5-dihydro-3(2H)-pyridazinones. Series of hypotensive agents

AU Curran, William V.; Ross, Adma

CS Lederle Lab. Div., Am. Cyanamide Co., Pearl River, NY, USA

SO Journal of Medicinal Chemistry (1974), 17(3), 273-81 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

AB Of a series of 55 derivs. of 6-phenyl-4,5-dihydro-3(2H)-pyridazinone (I) [1011-46-7] prepd. by the cyclization reaction of NH2NH2 with the appropriate .gamma.-keto acid, the derivs. with cyano, acetamido, nitro, or amino groups in the para or meta position of the benzene ring combined with the 5-methyl substituent in the hetero ring were the most active hypotensive agents in normotensive rats. Toxicity expts. with the active compds. in mice, dogs, and monkeys resulted in hemorrhagic patches in the heart area. Structure-activity relationships are discussed.

IT 36725-23-2P 52239-83-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and hypotensive activity of)

RN 36725-23-2 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 52239-83-5 CAPLUS

CN Benzoic acid, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1972:419664 CAPLUS

DN 77:19664

TI Hypotensive 6-aryl-4,5-dihydro-3(2H)-pyridazinones

IN Curran, William V.; Ross, Adma Schneller; Tomcufcik, Andrew S.

PA American Cyanamid Co.

SO Ger. Offen., 53 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 4

1111.0111 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	DE 2150436	Α	19720413	DE 1971-2150436	19711009	
	US 3689652	Α	19720905	US 1970-79671	19701009	
	US 3746712	Α	19730717	US 1971-151154	19710608	
PRAI	US 1970-79670		19701009			
	US 1970-79671		19701009			
	US 1971-151154		19710608			
	US 1971-151155		19710608			

GI For diagram(s), see printed CA Issue.

AB Twenty-one title compds. [I; R,R1,R2 = H or Me; R3 = H, CN, NO2, NH2, NHAc, or Cl; R4 = H, CN, H2NCO, morpholino, AcNH, NH2, Cl, Me, Br, F, or iodine, or R3R4 = (CH2)4] were prepd. by ring closure of 3,4-R3R4C6H3COCH(R2)-CH(R1)CO2H (II) with H2NNHR optionally followed by converting into a deriv., e.g. by hydrolysis, redn., or acetylation. I had hypotensive activities in rats. Thus, II (R1 = R3 = H, R2 = Me, R4 = NHAc), and H2NNH2 in EtOH were refluxed 2 hr to give I (R = R1 = R3 = H, R2 = Me, R4 = NHAc) (III). Re-fluxing III with NaOH-MeOH gave I (R = R1 = R3 = H, R2 = Me, R4 = NH2).

IT 36725-23-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 36725-23-2 CAPLUS

CN Benzamide, 4-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$H_2N-C$$
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 0
 0

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